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COMED EXHIBIT _____

STATE OF ILLINOIS
BEFORE THE
ILLINOIS COMMERCE COMMISSION

Commonwealth Edison Company

Petition for declaration of service currently provided under Rate 6L to 3 MW and greater customers as a competitive service pursuant to Section 16-113 of the Public Utilities Act and approval of related tariff amendments.

Docket No. 02-_____

DIRECT TESTIMONY OF KARL A. MCDERMOTT

Vice President, National Economic Research Associates

July 2002

PREPARED DIRECT TESTIMONY
OF
KARL A. MCDERMOTT

I. QUALIFICATIONS, PURPOSE, AND CONCLUSIONS

Q. PLEASE STATE YOUR NAME.

A. My name is Dr. Karl A. McDermott. I am a Vice President of National Economic Research Associates, Inc. ("NERA"). My business address is 875 North Michigan Avenue, Suite 3650, Chicago, Illinois 60611.

Q. PLEASE STATE YOUR QUALIFICATIONS.

A. I received a B.A. in Economics from Indiana University of Pennsylvania, a M.A. in Public Utility Economics at the University of Wyoming, and a Ph.D. in Economics at the University of Illinois at Urbana-Champaign.

From April 1992 until May 1998, I served as a Commissioner at the Illinois Commerce Commission ("ICC" or the "Commission"). Prior to that, I was founder and served as the President of the Center for Regulatory Studies ("CRS"), a not-for-profit company that was located on the campus of the Illinois State University. Before founding the CRS, I worked in numerous capacities in the regulatory industry including positions on the staff of the ICC, the National Regulatory Research Institute ("NRRI"), and Argonne National Laboratory. Since leaving the ICC, I have testified as an expert witness on behalf of electric, gas, and telecommunications firms. A copy of my Curriculum Vitae is attached as Exhibit KAM-1.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide, based on my experience as a former regulator and as an economist, a policy perspective on why Commonwealth Edison Company's ("ComEd") Rate 6L, for customers with 3 MW or greater of peak demand, should be declared competitive pursuant to Section 16-113 of the Illinois Public Utilities Act ("Act").

Based on my experience, I will provide a context for this proposal in the evolution of the electric markets in Illinois. In light of that experience, particularly as a Commissioner at the ICC where I had the responsibility for evaluating a number of similar issues in the electricity, natural gas, and telecommunications industries, some of which I did not vote to approve, and my review of this proposed declaration of certain services as competitive, it is my opinion that ComEd's proposal is justified from both an economic and public policy perspective and will contribute to, rather than hinder, the development of competitive electricity markets in Illinois. Furthermore, both residential and small commercial customers and those customers that would remain on Rate 6L for the time being would be better off when Rate 6L is declared competitive for large customers with peak demand of 3MW or greater.

As indicated by Section 16-113 of the Act, service to these customers should be declared competitive if reasonably equivalent substitute service is reasonably available at a comparable price from other, unaffiliated providers and ComEd is losing customers, or is likely to lose customers to alternative providers of power and energy. I have evaluated ComEd's proposal with a disinterested, critical eye, and based on that review find that it is reasonable and in the public interest to approve this request.

I also discuss some of the factors that I feel act as "safeguards" against any potential unintended consequences associated with declaring this service to be competitive. For example, ComEd will continue to provide bundled electricity services to this customer group for some period of time via its Rate HEP under terms and conditions approved by the ICC. Also, I suggest that the Commission allow this declaration to go into effect as a matter of law as provided for under Section 16-113, given that this procedure gives the Commission flexibility to review or change this determination going forward.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS.

A. Based on my perspective as an economist and former regulator, I conclude that:

- **The markets to provide power and energy to large customers in ComEd's territory are working.** Based on the evidence that I have reviewed and evaluated with respect to the openness to entry into retail markets within ComEd's distribution service territory, I find that the retail generation commodity services provided by ComEd under Rate 6L to customers with 3 MW or greater of peak demand should be declared competitive. All significant regulatory and legal entry barriers have been removed and timely entry is possible at current prices.

- **Declaring Rate 6L competitive for customers with 3 MW or greater of peak demand is timely and necessary.** First, and most important, as a result of the various provisions of the Act, entry into retail generation-related markets is open. Specifically, I am referring to regulated and required access for third-party power and energy to be delivered to retail customers and the wholesale market structure that is evolving in Illinois. Second, there is empirical evidence that ComEd's largest customers are making choices and alternative suppliers are willing to provide energy services to these customers. Third, some of those

customers who have not "switched" are actually customers who have made competitive choices in the past. I am referring to special contracts and contracts under Rate CS that the Commission approved because these customers had clear competitive alternatives that could be documented. These factors indicate that market forces are capable of providing services to ComEd's largest customers and that, in the future, the competitive conditions in Illinois are only going to improve.

- **The Act contemplates that the barriers to competitive provision of power and energy will be eliminated.** The purpose of electric restructuring in Illinois was to provide consumers with choices, while recognizing that the transition to efficient and competitive electricity markets would take some time. The reliance on competitive markets, where feasible, has been a hallmark of deregulation efforts in many different industries including electricity. However, the ongoing development of competitive markets require that pricing decisions be left to the greatest extent practicable to the decentralized players in the markets, without the interference of regulatory polices that undermine economic decision making in the marketplace. The problem in this case is that the continued provision of certain tariff services that can be used as fixed price options is, as a matter of regulatory policy, inconsistent with the move to fully competitive markets. Such regulatory polices make it difficult for firms to provide these services on a competitive basis. While initially the policy of keeping these services was designed to soften the transition, it has now become apparent that, at least for the large customers that are the subject of this petition, markets can be relied on to dictate the prices and terms and conditions of commodity electricity service as well as any value-added services. Maintaining a service like Rate 6L in this situation is a barrier to ongoing competitive development that should be eliminated.

- **Competition in Illinois has been more successful than in other states and it is time to reevaluate some of the "transition policies" that exist in the Act.** The deregulation of the electric industry in the U.S. has proven to be somewhat more complicated than we first imagined. My initial skepticism of retail competition as a proper public policy tool has been reinforced by certain results and lessened by others. Currently, 16 states and the District of Columbia, comprising about 43.5 percent of the U.S. population, have retail competition in place for some (and in most cases all) customers. (States that have implemented electric restructuring for some or all customers include Arizona, Connecticut, Delaware, Illinois, Massachusetts, Maine, Maryland, Michigan, New Hampshire, New Jersey, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Texas, and the District of Columbia.) California, of course, introduced "direct access" retail competition but then moved away from it. The experience in California, however, is not representative of the state of competition in the U.S. and especially not in Illinois. It is clear to me that with respect to ComEd's largest customers, retail competition has been successful and, in fact, so successful that it is now time to remove some of the "transition policies" in order to fully test the markets and how they respond to these policy changes. I am speaking in particular about the role the incumbent utility (in this case ComEd) plays in the marketplace. This proceeding is to, at least for the time being, determine ComEd's role as the provider of power and energy to the largest customers in its service territory. As noted above, the goal of restructuring was always to provide customers with options and create an environment where economics dictated the price of power and energy. The proposal to create a group of customers that are completely reliant on markets for power and energy is a logical next step in the evolution of this marketplace. While it is true that these customers will have the

option to choose ComEd's Rate HEP (real-time pricing), Rate HEP is a market-based rate that will provide customers with proper short term signals.

- **ComEd would continue to provide a real-time pricing service that would be reflective of the short-term wholesale cost of electricity, which is a useful safeguard against unanticipated events.** Rate HEP will operate as the "default" regulated service for customers that have 3 MW or greater of peak demand. This service would provide a tariff rate for those customers that wish to continue to take tariff service from the utility, while accommodating the development of competitive alternatives in the competitive marketplace.

- **Allowing the ComEd's declaration of Rate 6L service for customers with 3 MW or greater of peak demand as competitive to go into effect as a matter of law is also in the interest of electricity customers.** Doing so preserves the Commission's options with respect to the reclassification.

II. REGULATION SHOULD BE ADAPTED TO REFLECT CHANGED COMPETITIVE CIRCUMSTANCES

Q. FROM A POLICY PERSPECTIVE, HOW DO YOU RECOMMEND REGULATORS DETERMINE WHEN TO DECLARE FORMERLY REGULATED SERVICES TO BE COMPETITIVE?

A. As markets that have been historically organized as regulated monopolies are opened to competition, there are two distinct events that should trigger changes in regulation.

1. When competition is first made possible in the market, regulation should be immediately adjusted so that it provides neither the entrant nor the incumbent any net advantage on a forward-looking basis.

2. When competitive forces effectively constrain the prices of the regulated firm in particular markets, regulation of those prices no longer serves a useful function and should be curtailed.

With respect to ComEd's Rate 6L customers with 3 MW or greater of peak demand, we are now at a stage in the evolution of the market where regulatory oversight of pricing policies should be phased out. That is, regulation of these prices no longer serves a useful function and should be curtailed.

Q. PLEASE EXPLAIN HOW THE POLICY CHANGES OVER THE PAST DECADE HAVE REDUCED REGULATORY AND LEGAL BARRIERS TO ENTRY INTO ILLINOIS' ELECTRICITY MARKETS.

A. As a result of the 1997 Amendments to the Act, entitled the "Electric Service Customer Choice and Rate Relief Law of 1997" ("Restructuring Act"), the F

ederal Energy Policy Act of 1992; and policies of the Federal Energy Regulatory Commission ("FERC") and ICC, legal and regulatory barriers to entry in the Illinois generation and retail marketplaces have been removed. These policy changes have allowed for non-affiliated third parties to legally provide power and energy over the transmission and distribution systems of the regulated utility to retail customers. Low regulatory and legal barriers to entry mean that competitors can quickly enter the marketplace where there are economic opportunities to do so. The resulting open entry in electricity commodity and retail markets

in Illinois benefits consumers by providing increased choices to consumers, which encourages innovation, constrains competitors' ability to raise prices, and encourages competitors to provide a high quality of service. While competition is further along for high-usage industrial and commercial customers than it is for average residential customers, the open entry provided by electric restructuring, along with the development and deployment of new technologies, is rapidly increasing the choices available to all customers.

However, the most important implication of the policy modifications discussed above is that the marketplace is open to entry by competitors, so that consumers have choices available to them. In reviewing this matter, it is important to remember that market share is not the same thing as market power. While the historic monopoly structure of the industry makes a large market share for the incumbent unavoidable as the franchise is opened up, policymakers should neither expect this to change overnight nor take this as a sign of market failure.

Q. DO THESE REGULATORY DEVELOPMENTS REDUCE COMPETITORS' SUNK COSTS OF ENTRY AND/OR THE RISK THAT ASSETS COULD BECOME FORECLOSED FROM REACHING CUSTOMERS VIA TRANSMISSION AND DISTRIBUTION WIRES?

A. Yes. A sunk cost is a cost that must be incurred to enter a market and that cannot be recovered if the firm later elects to leave the market. It is generally recognized that industries characterized by relatively high sunk costs are more likely to deviate from the conditions that prevail under competition.[1] An example of a sunk cost is the cost of digging

[1] See Alfred E. Kahn, *The Economics of Regulation*, MIT Press, 1988, Volume II at 119-123 for a detailed explanation of why this is the case.

up streets and laying down cable or building poles and stringing wires.[2] It is unquestionable that the FERC's open-access transmission policies (as articulated in its Order No. 888), coupled with other FERC and ICC requirements, reduces the absolute level of sunk cost a firm needs to incur in order to enter a market. Competitors are now able to acquire generation capacity or build a generation plant and are assured of the availability of interconnection, thereby reducing sunk costs and facilitating various entry strategies.

Reducing the sunk costs of entry provides a disciplining force—open entry—that prevents the incumbent from exercising undue influence over prices, regardless of how far competition actually has progressed in the marketplace. There does not have to be any actual marketplace entry by competitors (although there is, in fact, considerable entry) in order to discipline the incumbent's pricing, as long as the prospect that choices will be available to consumers is real and apparent to the incumbent. This condition is satisfied when both entry and exit are relatively open, because any excessive prices or other abuses by an incumbent will attract entrants who will be capable of responding quickly. It is therefore imperative that the ICC take the openness of the retail electricity marketplace into account when determining how to provide regulatory oversight over ComEd.

Q. HOW CAN SWITCHING DATA CONFIRM THAT RETAIL ELECTRICITY MARKETS IN ILLINOIS ARE OPEN TO ENTRY?

A. Switching data has to be evaluated carefully because some states provided "shopping credits" to induce customers to switch, and therefore the switching rates observed may simply be an artifact of that regulatory policy (*i.e.*, inefficient competitors may in some cases be gaining market share from more efficient providers). Furthermore, as noted above,

[2] Note that the cost of poles and wires themselves may only be partially sunk if they maintain salvage value.

the lack of switching cannot confirm the absence of competition or imply that the incumbent has market power. However, it is clearly the case that switching has been occurring both in Illinois and elsewhere. As shown below in Table 1, the evidence indicates that considerable switching has already occurred in Illinois, especially in ComEd's service territory. Thus the switching data, in this case, can be used to confirm that entry into Illinois' retail electricity markets is open, and that entry has actually occurred at levels that are relatively robust even compared to states that utilized large incentives via "shopping credits" to induce switching.

Table 1: Switching Rates in Various States

State	Residential	Non-Residential			Total (all)	As of:
		Commercial	Industrial	Total		
California[1]	0.80%			20.80%	13.40%	4/30/02
Illinois[2]		25.16%	47.06%		33.48%	5/31/02
Maine[3]	<1%	33.00%	81.00%		42.00%	6/01/02
Maryland[4]	4.20%			15.90%	10.20%	5/31/02
Massachusetts	0.90%			31.99%	22.12%	5/01/02
Michigan	0.00%				1.60%	1/1/02
New Jersey					1.28%	11/30/01
New York[2]	5.00%			23.60%	16.20%	1/31/02
Ohio	14.93%	15.03%	10.14%		11.82%	3/31/02
Pennsylvania	6.24%	10.01%	9.39%		8.01%	7/01/02
Rhode Island[5]					11.60%	3/31/02

1. California has suspended direct access retroactively to September 20, 2001; customers with direct access contracts executed before this date may continue.
2. Date is percent of eligible load.
3. Data is for Central Maine Power.
4. Percentage of peak load obligation.
5. Date is reported for Narragansett Electric Company, the distribution utility for most of Rhode Island.

III. RECLASSIFYING RATE 6L FOR CUSTOMERS WITH 3 MW OR GREATER OF PEAK DEMAND IS JUSTIFIED AS A MATTER OF ECONOMICS AND PUBLIC POLICY

Q. WHY DO YOU BELIEVE THAT THE PROPOSED DECLARATION OF SERVICE AS COMPETITIVE IS TIMELY AND NECESSARY?

A. Movements toward increased wholesale and retail competition in Illinois stem from ICC and FERC initiatives and particularly the Restructuring Act, as well as additional amendments to the Act after 1997. From an economist's perspective, the movement toward increased competition in Illinois requires a commensurate change in regulatory treatment of bundled sales service. Just as the extent of competition defines a continuum from monopoly supply to open competition, the regulatory spectrum ranges from strict regulation

of earnings, prices, services, and service quality to eventual deregulation of large segments of the industry. As the level of competition changes, a corresponding change in regulation from the current "hybrid" model is necessary to avoid inefficient competition that, unchecked, would reduce consumer welfare.

From a regulator's perspective, potential effects on all customers, not just those most immediately affected, both short and long term are to be considered. That is, as the market evolves, there are remaining questions concerning the regulatory treatment of customers that have not had their tariff rates declared competitive. First, as will be discussed below, the market for smaller usage customers will only be enhanced if the natural evolution of the marketplace is allowed to continue by the Commission approving this petition or allowing it to go into effect by operation of law. Second, allowing bundled rates (*i.e.*, Rate 6L) to act as an optional, non-market based procurement method for customers that clearly have alternatives is likely to increase the cost of service applied to the customers remaining on tariffed services. Therefore, the Commission needs to evaluate this proposal as it evaluates any rate proposal based on economics, fairness to all customer classes, and good regulatory policy.

Q. PLEASE BRIEFLY DESCRIBE WHAT YOU MEAN BY A "HYBRID" MODEL.

A. During the early stages of the introduction of retail competition, policymakers have determined that some electricity users may prefer to continue to receive service from the utility. To meet this perceived consumer preference, policymakers in a number of states developed an electric restructuring model that allowed customers to remain on frozen bundled rates or that converted customers that remain with the utility to a default, so-called "standard offer" service that is somewhat similar to the service that had traditionally been

provided by the vertically-integrated utility. While this hybrid electric restructuring model is often assumed to be necessary from a transitional point of view, this places regulators in the challenging position of promoting the development of retail competition while the utility continues to charge a regulated price for standard offer service. This introduces economic inefficiencies because the utility price is frozen and does not change as the market price changes, thereby distorting the choices made by customers and potential entrants. I recommend that this approach be phased out for Rate 6L customers with 3 MW or greater of peak demand, though they would be able to take ComEd's market-priced Rate HEP service if they wish to do so. This is consistent with the transitional mechanisms provided for by the Illinois General Assembly.

In crafting a transition policy, legislators and regulators must balance concerns about customer familiarity and comfort with tariff choices with the need to minimize the economic inefficiencies inherent in frozen standard offer service. While these initial concerns are important, it is equally important to insure that these trade-offs do not delay the development of competition in wholesale and retail markets. Otherwise, as Alfred Kahn once noted in a different context, we may wind up with a "mixed system" of competition and regulation that "may be the worst of both possible worlds."[3]

Q. PLEASE EXPLAIN HOW RETAIL ELECTRICITY MARKET REFORM HAS AFFECTED THE INDUSTRY IN ILLINOIS.

A. Electric restructuring has required fundamental changes in the organization and regulation of the industry. In particular, the Restructuring Act has reversed long-standing public policy regarding the provision of retail generation commodity service by deciding to rely on

[3] *See* Alfred E. Kahn, *The Economics of Regulation: Principles and Institutions* (MIT Press, 1992), p.xxxv.

competitive markets rather than regulation to achieve policy goals. By making the choice of whether or not to use the electric utility to procure electricity for the customer a voluntary one, policymakers were able to "defuse" at least some of the pressures on the old regulatory system, thereby allowing the state to move to a less centralized system, where customers could choose for themselves their supplier of the electricity commodity. With electric restructuring, electric customers are allowed to choose their electricity provider. The incumbent utility provides distribution and transmission services, and, in many cases, a tariff service as well. Stranded generation costs have been addressed, rates have been unbundled to provide open access, social programs have been funded on a competitively-neutral basis, and a transition to full retail competition has been mapped out. While skeptics of retail competition, including myself, doubted whether focusing on retail competition was the appropriate response while wholesale transaction reforms were still being implemented, policymakers in a number of states have used retail competition as one component of the major—and interrelated—sets of reforms that electric restructuring represents.

Q. WAS THE RESTRUCTURING ACT MEANT TO ENCOURAGE COMPETITION SOLELY FOR ONE CLASS OF CUSTOMERS?

A. No. The Restructuring Act notes that "a competitive wholesale and retail market must benefit all Illinois citizens."[4] Nevertheless, the Restructuring Act also recognized that "...the State has a continued interest in assuring that the safety, reliability, and affordability of electrical power is not sacrificed to competitive pressures, and to that end, intends to implement safeguards to assure that the industry continues to operate the electrical system

[4] Section 16-101A (d) of the Restructuring Act. 220 ILCS 5/16-101A(d).

in a manner that will serve the public's interest."[5] Among other safeguards in the Act, retail competition was introduced in stages with services to large customers becoming available well before retail competition was introduced for residential customers and utilities retained the sole responsibility for providing services to all customers at fixed prices (subject to certain limitations) until such time as it could be shown, in a proceeding such as this one, that those services no longer were required for the Act's goals to be met.

Q. PLEASE DESCRIBE THE POLICY TOWARD COMPETITION ENVISIONED IN THE RESTRUCTURING ACT.

A. The Illinois General Assembly devised a plan whereby competition would be slowly introduced through incremental changes while allowing incumbent utilities the opportunity to reorganize their businesses in response to this new environment. While this plan did not move as quickly to reinvent the market structure as plans in California, New York, Massachusetts did, it did allow for a "wait and see" approach that has turned out to be a good hedge against the uncertainties surrounding electricity restructuring. Illinois has avoided the rate increases seen in California and other states, and has avoided the inefficient entry that has plagued states such as Pennsylvania.

However, the plan also provided for incremental changes as the market evolves and the sophistication of market participants increases. One of those changes is the policy put forth in Section 16-113 that allows for the removal of the fixed-priced tariff rates from the market for those customers that have sufficient market-based alternatives.

Q. YOU NOTED THAT THE RESTRUCTURING ACT IMPLEMENTED COMPETITION IN THE ILLINOIS ELECTRIC MARKET IN PHASES WITH

[5] Section 16-101A (c) of the Restructuring Act. 220 ILCS 5/16-101A(c).

LARGE USE CUSTOMERS OFFERED THE FIRST OPPORTUNITY TO TEST THE COMPETITIVE WATERS. HOW COMMON IS THAT APPROACH TO DEREGULATION?

A. This is a common approach in many industries and across many jurisdictions. In both the telecommunications industry and the natural gas industry large volume users were generally the first to be provided a choice of suppliers. For example, in Illinois, large natural gas users were provided "transportation" service many years prior to the introduction of these same services for smaller use customers.[6] Telecommunications competition has also evolved along these same lines for both long-distance and local exchange services. Large users were the first to be provided "bypass" services by competitive long-distance carriers and also the first to take advantage of local exchange services provided by competitive carriers. In part, it was this very process that prompted Congress to pass the Telecommunications Act of 1996 to allow the competitive process to expand beyond the large and special use customers to a broader spectrum of consumers and services. Without the proven ability of competitors to serve the large volume markets it is unlikely that competition would have been contemplated for the small volume customers in either the long-distance or local exchange markets. As for electricity, in many of the jurisdictions that I am familiar with, both domestically and internationally,[7] competition has evolved along these lines and provided for large use electric customers to choose first with smaller customers following at varying intervals. Even in those states that introduced retail competition all at once, regulators were very careful to build in protections (*e.g.*, some form

[6] Transportation rates are analogous to the electric delivery services. These tariffs allow third parties to use the local gas company's pipes to deliver gas commodity to retail customers.

[7] For example, the 1996 European Commission Electricity Directive (96/92/EC, OJ L 27, 30.1.1997) adopted a market liberalization plan that allowed the largest users to have open access prior to smaller users.

of the hybrid electric restructuring model) so that small residential were not forced to take a nonregulated, competitive service. These transitional policies are clearly no longer needed for ComEd customers with peak demand of 3 MW or greater that take service under Rate 6L.

Q. ARE THERE ANY ECONOMIC OR REGULATORY REASONS WHY SUCH A PHASE-IN MAY BE APPROPRIATE?

A. There are several reasons why this approach has been favored. First, the economics of providing a commodity service, such as electricity or gas, tend to favor the large volume users because commodities tend to be priced such that margins are extremely thin. Large volume users are more likely to obtain large (absolute) savings due to the large amount of usage relative to smaller use customers. Large use customers also tend to be industrial or very large commercial entities that recognize energy costs as an important part of their cost of doing business and are therefore very sensitive to price and risk. This makes these customers attractive to alternative providers in terms of the "wholesale" nature of their load and the potential value-added services such as energy management, price hedging products, etc. that these providers can market to this customer class. Furthermore, there are fixed "transactions costs" associated with obtaining customers, such as advertising and marketing, that can most easily be spread over a large number of units sold and hence alternative suppliers are most likely to compete for the larger volume users first.

Second, from a regulatory viewpoint, large users are more likely to be sophisticated buyers of many inputs into production and are, therefore, more likely to be sophisticated buyers of power and energy. Regulators and legislators tend to provide significantly more flexibility to these customer classes, including allowing them first access to the open market. This

proposal is a logical result of the process of restructuring and deregulation of the electric market.

Last, from a public policy perspective, competition has been offered as a replacement for regulation where competition serves the public better than regulation. In order for competition to efficiently serve the public, competition has to be allowed to develop and competitors need to be allowed to develop the expertise that will allow them to effectively provide energy services to a larger and larger group of customers. However, with services such as Rate 6L to fall back on, customers will only rely on the competitive market when the market price falls below this non-market based tariff price. This is not true competition in the common meaning of the term, rather it is a form of managed competition that will only serve to hurt customers in the long-run by denying competitors the opportunities to achieve economies by learning-by-doing.

~~Q. DID THE RESTRUCTURING ACT CONTEMPLATE EVENTUAL DEREGULATION IN THE GENERATION COMMODITY AND RETAIL MARKETS?~~

~~A. Yes. In passing the Restructuring Act, the Illinois legislature sought to establish a deregulatory framework in Illinois. A principal goal of such a pro-competitive policy is to permit market forces to substitute for, and not simply add to, regulation in order to obtain the maximum benefits of competition~~.

Q. PLEASE DESCRIBE HOW IMPLEMENTATION OF COMED'S PROPOSAL IN THIS PROCEEDING WILL BENEFIT ILLINOIS' ELECTRICITY MARKETS.

A. This proposal will benefit both the demand side of the market and the supply side of the market as customers begin to be provided more appropriate price signals and resources are free to be reallocated according to economic principles.

Q. SPECIFICALLY, HOW DOES THE COMED PROPOSAL STIMULATE THE DEMAND SIDE OF THE ELECTRIC MARKET?

A. There are two issues here. First, declaring Rate 6L competitive for this customer group will begin to stimulate additional demands for wholesale power and energy. This is critically important as competitive markets require not only multiple sellers but also multiple buyers. This proposal will create additional demand for wholesale power and will help promote the development of short-term (*i.e.*, spot and day-ahead) markets as well as the longer term contracts markets. Second, the proposal allows for customers to receive a hourly energy pricing service from ComEd through its Rate HEP. To the extent that customers find this rate attractive, they will be provided the correct signals to remove load from the system when prices are high and increase consumption when prices begin to fall.

Q. TO WHAT EXTENT DO CUSTOMERS NEED OPERATING RISK MITIGATION TOOLS BEFORE SUCH PROPOSALS MAKE SENSE?

A. Risk mitigation tools such as forwards and options and other price insurance products need a functioning market in order to develop. Currently, these types of products are being provided to some extent by the market place. More would be expected to develop as competition continues to evolve. For the large customers with 3 MW or greater of peak demand that are of interest here, both standardized and custom products are available, relating to: (1) products aimed at helping electricity users meet basic energy needs (*e.g.*, large energy users can purchase standardized "5 by 16" strips of energy); (2) hedging and

normalizing price volatility (*e.g.*, protecting against higher-than-normal summer prices; (3) providing sophisticated energy management services; (4) allowing customers to aggregate loads into power purchasing pools; and (5) meeting the other energy-related needs of energy users. For large customers in ComEd's distribution service area, alternatives are already available, which would expand if sufficient demand develops. This proposal helps bridge the gap between being too cautious and delaying the evolution of the market and being overly permissive and creating conditions that could harm customers.

Q. PLEASE EXPLAIN HOW THIS PROPOSAL WILL BENEFIT THE SUPPLY SIDE OF THE MARKET.

A. As a result of this proposal, capacity that would have been committed to the provision of firm service under a regulated Rate 6L tariff will be free to be resold. Creating this additional "pool" of capacity improves the liquidity of the market by providing capacity that is likely to be more responsive to market forces. For example, capacity that is freed as a result of this proposal can be sold in the forwards markets to marketers or other intermediaries that can use that capacity to provide "physical" hedging in their portfolio of generation. This allows for market participants to create resource portfolios that have both physical and financial aspects to them in order to serve their customers in a cost effective manner.

Q. SOME OF THIS CAPACITY IS CONTROLLED BY COMED'S AFFILIATED GENERATION COMPANY. DO YOU BELIEVE THIS IS A CAUSE FOR CONCERN?

A. In this case, I do not believe it is problematic. There are two aspects of this question that lead me to this conclusion. First, is whether, as a matter of regulatory policy, this should concern the Commission. ~~This question has been answered by the Illinois General~~

~~Assembly. In re-writing the Act, the General Assembly made a conscious decision to allow the incumbent utilities, or their affiliated generation companies, to maintain a strong presence in the local electric markets, if they so choose~~. Second, in the case of ComEd and the Northern Illinois generation market, Exelon is only one of multiple generation owners. The ownership of generation in Northern Illinois has been dramatically altered by ComEd's voluntary decision to divest capacity, as approved by the Commission. The ownership figures are detailed in the testimony of ComEd witnesses William McNeil and Jennifer Sterling. Exelon will continue to provide a necessary portion of the generation that will help to maintain liquid markets and promote competition between these generation owners.

Q. WHY DO YOU BELIEVE THAT IT IS IMPORTANT TO REDUCE RETAIL REGULATORY CONSTRAINTS OR MAKE THEM AS SYMMETRICAL AS POSSIBLE?

A. An important purpose of the Restructuring Act is to support the phase-out of regulation for all tariff services with competitive alternatives. It is important to remember that even imperfect competition is likely to better regulate price than regulation. As that competition does emerge, regulators need to recognize that electric restructuring, and the ICC's implementation of it, have done their job and that society can rely solely on the marketplace, rather than regulation.

As these conditions are demonstrably met with respect to large industrial customers with peak demand of 3 MW or greater, the ICC should ensure that all companies have the freedom to offer services that are responsive to customer demand, including contract pricing. Entrants already are able to tailor their prices and service offerings to the demands of particular customers and customer classes. While some customers may wish to retain

retail tariff service, ComEd's Rate HEP is sufficient to ensure that large customers that wish to retain service with ComEd can do so.

Q. WHY SHOULDN'T A UTILITY BE REQUIRED TO PROVIDE A BROAD-BASED, REGULATED, FIXED PRICE GENERATION COMMODITY SERVICE TO CUSTOMERS THAT ARE SHOWN TO HAVE ADEQUATE COMPETITIVE ALTERNATIVES?

A. Once entry is open to customers and they have begun to take advantage of choices that are available to them, there is no longer a need for the utility to provide regulated generation commodity services on a bundled, fixed price basis. Indeed, doing so considerably muddies the waters from the standpoint of demand response by consumers and can be detrimental to the economic conditions that guide entry by alternative suppliers. It would be difficult for competitors to develop and market value-added services if the utility indirectly provides these services as part of a regulated tariffed service.

The "hybrid" electric restructuring model is only a transition mechanism. The result of this approach is a model of competition in which the regulatory determined price is more important than the price signals inherent in the prices of competing retail service providers. Before regulators and policy makers designed these markets, it would have been difficult (to say the least) to imagine any retail market in which neither realized wholesale prices nor realized demand had any real influence on retail prices. This, however, is exactly what can happen when the price for standard offer service becomes the prevailing market price.

Q. PLEASE SUMMARIZE WHY IT IS APPROPRIATE, AT THIS TIME, TO DECLARE RATE 6L COMPETITIVE FOR THE 3MW AND GREATER CUSTOMERS?

A. There are a number of reasons why I view this action as timely. First, and most important, as a result of the Restructuring Act, competitive conditions have improved for customers. Specifically, I am referring to (regulated and required) access to third-party power and energy and the wholesale market structure that is evolving in Illinois. Second, there is empirical evidence that ComEd's largest customers are making choices and that alternative suppliers are willing to provide energy services to these customers. Third, some of those customers who have not "switched" are actually customers who have made competitive choices in the past. I am referring to special contracts and contracts under Rate CS that the Commission approved because these customers had clear competitive alternatives that could be documented. These factors indicate that market forces are capable of providing services to ComEd's largest customers and that, in the future, the competitive conditions in Illinois are only going to improve. Finally, there are aspects of future rate design and cost recovery that are currently open issues. For example, who will be required to pay for the cost of procuring firm capacity for large users that switch to alternative suppliers when market prices fall? At the close of the transition period this cost of doing business would need to be recovered through one of ComEd's regulated rates, (*e.g.*, either through delivery services or through bundled rates for remaining customers). From a regulatory perspective, it makes no sense to maintain costly firm generation for customers that clearly have the ability to procure that power and energy on their own. This is simply a matter of fairness to the remaining customers.

Q. YOU MENTIONED THE "SPECIAL" CONTRACT CUSTOMERS AND THE CHOICES THEY HAVE MADE IN THE PAST. WHY IS IT CRITICAL TO MOVE FORWARD ON THIS PROPOSAL AT THIS POINT WITH RESPECT TO THESE CUSTOMERS?

A. There is a need to provide some certainty on the structure of the choices these customers will have in the immediate future (*i.e.*, 3-6 years). I understand that many of these contracts will be expiring in the next few years and it is important that the right institutional framework is created to support customers making rational competitive choices going forward. This is critical not only for the electricity market, but it is also important as these customers represent some of the largest Illinois companies and they need to be provided the correct institutions through which to procure this important input to production.

IV. PROTECTIONS FOR CUSTOMERS ARE IN PLACE TO ENSURE THAT THE PUBLIC INTEREST IS SERVED

Q. EARLIER IN YOUR TESTIMONY YOU MENTIONED THAT THE GENERAL ASSEMBLY "HEDGED" ITS BETS BY MOVING SLOWLY IN THE RESTRUCTURING OF THE ILLINOIS ELECTRIC MARKETPLACE. WHAT SAFEGUARDS EXIST IN COMED'S PROPOSAL THAT "HEDGE" AGAINST UNEXPECTED OUTCOMES?

A. There are multiple "safeguards" that are built into the Act and this proposal that should provide the Commission and customer groups with additional assurances against unexpected outcomes. First, the Act requires a "grandfathering" for all customers affected by this petition for three years past the time the tariff has been declared competitive. This provides customers that have not chosen to switch suppliers with sufficient time to learn about and explore their alternatives while at the same time providing the utility with some certainty concerning its future obligations. Second, ComEd is not requesting that the tariff amendments it proposes begin to affect customers until early summer of 2003. This provides additional time for customers (and suppliers) to adjust to the new environment. Third, if the Commission uses the operation of law process I recommend, it has the

authority under the Act to revisit this issue if in fact conditions change so drastically as to warrant a further investigation. While the Commission has similar authority for other rates, terms and conditions, ComEd is also proposing to file quarterly reports on customer choice and RTO development that will bring information to the Commission concerning the market environment in a timely and straightforward manner. Fourth, again as noted earlier, the Act required that incumbent utilities provide real-time pricing tariffs under Article IX. ComEd's Rate HEP is not being declared competitive as part of this filing and therefore will remain available for all customers, including those affected by this petition, until such time as a petition to declare Rate HEP as competitive is reviewed and approved under Section 16-113 of the Act. These safeguards, and the operation of law procedure that I recommend, provide for a reasonable transition under this proposal and will enable the commission to closely monitor the evolution of the retail electric market in Illinois, which will provide a basis for moving to declare services to other customers competitive as electricity markets evolve.

Q. WHAT DO YOU MEAN BY ALLOWING THE PETITION TO GO INTO EFFECT BY OPERATION OF LAW?

A. I am referring to the procedure contemplated by Section 16-113 of the Act whereby the Commission can allow the declaration of a competitive service to go into effect without making a decision as to the specific parameters outlined in that section. By choosing this procedure, the Commission clearly preserves its ability to review this matter at a later time. This is a clear benefit to both the Commission and customers and "hedges" the bet on competition. Of course, in the alternative, the Commission could enter an order making a decision based on the facts provided in the testimony of ComEd that the service is indeed competitive and should be approved as such.

Q. WHY DO YOU RECOMMEND THAT THE COMMISSION CHOOSE TO ALLOW THIS PETITION TO GO INTO EFFECT AS A MATTER OF LAW?

A. The reason this policy approach is beneficial for both the Commission and the public is that it preserves a degree of flexibility that other alternatives do not offer. First, it signals the Commission's intent to support the progress of the marketplace as the Act intended. Second, it clearly preserves the right of the Commission to open an investigation should problems arise in the future. In contrast, under the law if this proposal is rejected, the Commission would foreclose the declaration for six months and slow the progress of competition. By choosing to allow this petition to go into effect as a matter of law, the Commission can simultaneously promote competitive developments without restricting its ability to investigate this decision should market entry conditions warrant such an action.

Q. HOW WOULD THE USE OF THIS PROCEDURE BE VIEWED BY THE MARKET AND THE PUBLIC?

A. I believe it would be viewed positively. Given that markets are developing at an uneven pace, the act of declaring certain markets competitive should act as a catalyst helping other markets to benefit from competitive developments. For example, all markets are interconnected to a greater or lesser extent. As capacity is freed up from the service to one submarket it becomes available to suppliers of other submarkets. As retailers' supply portfolios are restructured, the cost effects of these restructurings will enable them to reach submarkets where profit margins are thinner and hence expand to benefit a greater number of retail customers. By allowing this petition to take effect by operation of law, the Commission has the opportunity to see just how far down into the customer base these competitive actions will permeate.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY IN THIS DOCKET?

A. Yes, it does.

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ATTACHMENT KAM - 1

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Dr. Karl McDermott is a Vice President with National Economic Research Associates, specializing in public utility regulation. Since Dr. McDermott came to NERA he has directed and participated in numerous projects in both the energy and telecommunications areas. His main focus has been the development of performance-based regulation mechanisms and advising clients on strategic regulatory options. Recent projects include evaluating and developing performance-based regulation plans and strategic regulatory options for Wisconsin Electric, Xcel Energy, Otter Tail Power, Peoples Energy, Louisville Gas and Electric and PowerGen along with MidAmerican Energy. In addition, Dr. McDermott also advises clients on competitive electric and gas markets including regulatory policy, generation location decisions, unbundling, tariff design and corporate reorganization. Recent projects include a examination of essential facilities debate for the Edison Electric Institute, tariff design and competitive electric generation sitting for Southern California Gas Company and Southern Energy, and a review of unbundling of metering and billing for Commonwealth Edison Company. Dr. McDermott has testified before numerous state regulatory commissions and legislatures along with the FCC and FERC.

Prior to arriving at NERA, Dr. McDermott served as Commissioner on the Illinois Commerce Commission during the negotiation of the Illinois restructuring law. He has also assisted the country of Poland since 1994 with their efforts to privatize and restructure their electric supply industry. As a Commissioner, Dr. McDermott also lectured extensively in Eastern Europe and South America on regulatory reform and restructuring.

During the six years that he served as Commissioner he has had an opportunity to evaluate alternative regulation proposals and the economic and social impacts of a number of new policies presented to the Commission. As a Commissioner, Dr. McDermott initiated the Commission's investigation into the alternative restructuring options and has made a number of presentations on restructuring issues.

Dr. McDermott received a B.A. in Economics from Indiana University of Pennsylvania, a M.A. in Public Utility Economics at the University of Wyoming, and a Ph.D. in Economics from the University of Illinois at Urbana-Champaign.

EDUCATION

Ph.D. 1990, Economics, University of Illinois at Urbana-Champaign
M.A. 1978, Public Utility Economics, University of Wyoming
B.A. 1976, Economics, Indiana University of Pennsylvania

Dissertation Topic: The Monetary Theory of Production of John Maynard Keynes

Additional Education

Michigan State Public Utility Course; Michigan State University

Seminar on Austrian Economics at Marquette University, Milwaukee, Wisconsin, conducted by the Institute of Humane Studies, Menlo Park, California

State of Illinois; Certificates in SPSS and advanced SPSS Computer Software Classes and TSO Operations

Illinois Bell Telephone Seminars on Separations and Settlements, Embedded Direct Analysis (EDA), Costs and Demand Analysis, and Engineering Characteristics of Telecommunication System

EMPLOYMENT

1999- NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC.
Vice President.

Directs projects in the energy and telecommunications fields in NERA's energy and telecommunications practices. Representative projects include:

- **Wisconsin Electric Power Company:** Dr. McDermott has provided advice and analysis to WEPCO for several years including issues related to industry structure, energy efficiency and performance-based regulation.
- **Otter Tail Power Company:** Conducted analysis on the appropriateness of performance-based regulation plan including providing testimony to the North Dakota Public Service Commission.
- **MidAmerican Energy Company:** Dr. McDermott has provided advice and analysis to MidAmerican for several years including providing analysis and testimony on performance-based regulation and strategic options.
- **Northern States Power d/b/a Xcel Energy:** Conducted analysis on the appropriateness of performance-based regulation plan including providing testimony to the North Dakota Public Service Commission.
- **Illinois Power Company:** Provided strategic advice on unbundling of residential retail rates earlier this year in anticipation of the retail access beginning in 2002.

- **Northern Indiana Public Service Company:** Dr. McDermott lead team that provided analysis of the Midwest wholesale electric market. (material confidential)
- ***Southern California* Gas Company:** Performed analysis of peaking rate design for gas partial bypass customers including providing testimony before the CPUC.
- **Commonwealth Edison Company:** Provided testimony on the appropriate avoided cost calculations for the unbundling of metering services in Illinois.
- **Peoples Gas Company:** Provided strategic advice related to regulatory and commercial issues.
- **County of Albania:** Conducted a market restructuring study detailing strategies for liberalization of the Albanian electric sector.
- **Country of Macedonia:** Project manager for team that provided analysis on options for electric sector liberalization including options for market structure and detailed recommendations for tariff methodology for generation and

1998-1999 MCDERMOTT ASSOCIATES
President.

Worked for various clients in the electric, and telephone industry including the Edison Electric Institute, Georgia Power Co., Bell Atlantic, L. E. Burgess Consultants and the United States Energy Association.

1992-1998 ILLINOIS COMMERCE COMMISSION
Commissioner.
Domestic:
Served as Chairman of both the Telecommunications Policy Committee and Electricity Policy Committee. Served on the National Association of Regulatory Utility Commissioners (NARUC) Energy Resources and Environment Committee as the Chairman of its environmental subcommittee. While at the Commission, reviewed and voted on Illinois Bell Price-Cap plan, Peoples Gas PBR and MidAmerican Electric PBR. Made over one-hundred presentations and speeches on telecommunications, electricity, and natural gas industry topics. Served on the President's Global Climate Change Task Force, the Federal Energy Regulatory Commission's Pipeline Competition Task Force, and as a member of the Harvard Electric Policy Group.

International:

In addition to regular Commission duties, served as part of the United States Energy Association and USAID educational effort in Eastern Europe. Lectured in Argentina, the Czech Republic, Latvia, Poland, Romania, Russia, and Slovakia. Participated in two joint USEA/USAID and World Bank seminars in Vienna providing advanced regulatory training. In addition, the Illinois Commission has hosted visits with the above-listed countries as well as Bulgaria, Lithuania, and Estonia.

PROFESSIONAL ACTIVITIES

1985-1998 *Chairman of the Board*, Center for Regulatory Studies, Inc.

1985-1992 *President*, Center for Regulatory Studies, Inc.

One of three cofounders of the Center. Involved in fundraising, organization, and program development. Focused on the development of statewide energy planning options for the State of Illinois, the introduction of competition into the natural gas market, environmental issues in Illinois, and competition in the Illinois telecommunications market. Conducted research on the use of competitive bidding and avoided-cost pricing mechanisms to acquire electricity supplies, the role of demand-side management in electricity supply planning, and the use of incentive mechanisms and the role of incentive regulation in our current regulatory environment.

1988-1992 *Research Scientist*, Argonne National Laboratory

Served as an economic advisor to the office of Fossil Energy at DOE. Investigated possible ways to promote development of innovative emission control technologies in the electric utility industry as part of the Presidential Task Force on Regulatory Relief directed by Vice President Bush. Involved in writing a chapter in the State of Science and Technology Report No. 25 of the National Acid Precipitation Assessment Program (NAPAP) concerning the use of tradable emission permits to control acid rain. Performed work on incentive mechanisms to promote clean coal technology and the trading of greenhouse gas emissions.

Performed research on the nature of individual's risk perception regarding nuclear waste deposits on behalf of the office of Radioactive Civilian Waste Management at the Department of Energy.

1988-1990 *President Elect and President*, Illinois Economic Association
Organized the 1989 Illinois Economic Association annual meeting and presided over the meetings.

1989- *Instructor*, NARUC Introductory Regulatory Training Program
Instructed new public utility commission employees from various state commissions on the basic economic issues confronting regulators.

1986-1992 *Lecturer in Economics*, Department of Economics, Illinois State University
Taught both graduate and undergraduate public utility courses, Money and Banking, as well as introductory courses.

1984-1991 *Instructor in Economics*, Parkland Community College, Champaign, Illinois
Taught both Principles of Economics I and II, with a typical course load of two sections of 35-40 students per class.

1984-1986 *Teaching Assistant*, University of Illinois, Champaign, Illinois
Taught both Principles of Economics and Introduction to Econometrics. In the spring semester of 1985, was the supervisory assistant in charge of coordinating the Economics 101 assistance for Professor Fred Gotthiel.

1982-1988 Graduate School, University of Illinois, Champaign, Illinois
Completed all coursework towards Ph.D. and defended dissertation on 6/12/88. Fields of specialization were: Monetary Theory and Policy, Macroeconomic Theory, and the History of Economic Thought.

1983-1985 *Consultant*, Select Joint Subcommittee on Regulatory Reform, Illinois Legislature
Investigated the effects of the AT&T divestiture and FCC decisions upon Illinois telephone utilities and assisted in identifying issues that require legislative action. Presentation of issue reports to the telecommunications subcommittee and served on the local exchange subgroup in developing recommendations for a new Illinois Public Utilities Act.

1980-1982 *Consultant*, Governor's Sunset Task Force on Utility Regulatory Reform, Department of Energy and Natural Resources
Delivered both written and oral reports on the issues of power plant certification, monitoring of construction costs, and allocation of power plant cancellation costs.

1980-1983 *Economic Analyst III*, Policy Analysis and Research Division,
Illinois Commerce Commission

Conducted research investigating the development and use of incentive mechanisms in utility regulation. Prepared and presented testimony on the use of incentive mechanisms in power plant construction.

Conducted research and assisted in developing testimony on the cost of service for electric generation to meet PURPA requirements.

Assisted in the development of proposals for PURPA innovative rates projects on productivity and time-of-use pricing; cost-benefit analysis. Assisted in the managing of consultants conducting the TOD cost-benefit study. Prepared and presented testimony on the time-of-day pricing standards to meet the PURPA requirements.

Prepared and presented testimony regarding the use of q-ratios in determining rates-of-return for Illinois Bell Telephone Company and testimony regarding appropriate cost and pricing methodology and philosophy for Illinois Bell Telephone Company.

Assisted in the investigation of capacity expansion, lifeline rates, efficiency measurement, and impact of deregulation in electric generation, water rate design; and investigated the impact of investment tax credit changes on utilities.

1978-1979 *Senior Research Associate*, National Regulatory Research Institute
Ohio State University

Conducted research in the areas of telecommunication licensee contract fees and cost of service, the effects of budget billing plans on utilities and consumers, and methods of monitoring fuel adjustment clauses.

Assisted in research regarding marginal and average cost pricing, time-of-use pricing, power plant productivity, and the examination of cost and price differences of Ohio municipal gas rates.

Assisted in the management of consultant subcontractors as well as supervising the presentation of cost and load research seminars.

9/79-12/79 *Lecturer in Economics*, Department of Economics, Ohio State University
Taught Macro Economic Principles to a class of approximately 100 students.

1977-1978 *Cost Analyst*, Action Computing, Laramie, Wyoming
Developed cost data for competitive pricing of bids for the provision of computer services provided by Action Computing.

1976-1977 *Graduate Research Assistant*, University of Wyoming, Laramie, Wyoming
Assisted professors in conducting research and teaching of Principles of Economics, while completing a Masters degree in Economics with specialization in Public Utility Economics and Industrial Organization Theory.

AWARDS

1986 Alpha Lambda Delta Outstanding Teacher of Freshman Award
at the University of Illinois

1983 Thrift Prize at the University of Illinois for the paper entitled *"The Allocation of Savings: An Investigation of Portfolio Composition of Chicago Households"*

PROFESSIONAL SOCIETY ACTIVITIES

Alpha Lambda Delta Honorary Society
American Economic Association
Transportation Public Utilities Group of American Economic Association
Illinois Economic Association

PUBLICATIONS

"The Essential Role of Earnings Sharing in the Design of Successful Performance-based Regulation Programs," forthcoming in *Towards Market Based Pricing of Electricity*, Kluwer Academic Publishers, London, UK. (with Carl R. Peterson)

"Is There a Rational Path to Salvaging Competition?" forthcoming in *The Electricity Journal.* (with Carl R. Peterson)

"Further State Electric Deregulation can be Guided by Gas Experience," forthcoming in *Natural Gas and Electric Power Industries Analysis,* R.E. Willett (ed), Financial Communications Company, Houston, TX, 2002, 343-372. (with Carl R. Peterson)

"Critical Issues in Consumer States Include Unbundling and Performance-based Regulation," in *Natural Gas Industry Analysis*, R.E. Willett (ed.), Financial Communications Company, Houston, 2000, 321-343.

"Are Residential Local Exchange Rates Too Low? Drivers to Competition in the Local Exchange Market and the Impact of Inefficient Prices," with A. Ros, in *Expanding Competition in Regulated Industries,* M. Crew (ed.), Kluwer Academic Publishers, Boston/Dordrecht/London, 2000, 149-168.

Essential Facilities, Economic Efficiency, and a Mandate to Share: A Policy Premier, with K. Gordon, W. Taylor and A. Ros, Edison Electric Institute, January 2000.

"Pipeline Regulation Must go to One Extreme or Another," *Natural Gas*, Vol. 15:9, April, 1999.

"Is There a Rational Path to Implementing Competition?" *The Electricity Journal.* Vol. 9:1 Jan-Feb 1996.

"Changing Regulatory Incentives," in *Reinventing Electric Utility Regulation,* G. Enholm and J. Robert Malko (Eds.), Public Utility Reports, Inc. Vienna, VA 1995.

"The Evolution of the "Investment Systems:" Keynes' Theory of Employment and Money Revisited." *Review of Social Economy,* Volume 51:1, Spring 1993.

Discussant. "The Urban Ozone Abatement Problem," in *Cost Effective Control of Urban Smog.* R. Kosobud, W. Testa, and D. Hansan (Eds.) Federal Reserve Bank of Chicago. November 1993.

"Strategic Use of Incentive Mechanisms as a Regulatory Policy Tool." *The Electricity Journal.* Vol. 5, No. 10, December 1992.

"Electric Utilities: Control Cost Reducing Methods," Chapter 7 in *Technologies and Other Measures for Controlling Emissions: Performance, Costs and Applicability,* David South (ed.). National Acid Precipitation Assessment Program, State-of-Science/Technology Report 25, January 1990.

"The Quantity Theory of Money of J. M. Keynes: From the Indian Currency to the General Theory" with Christopher Marme in *Perspectives on the History of Economics Thought.* D., Walker (ed.), Edward Edgar Publishing Co., Brookfield, VT (1989).

Computer Assisted Regulatory Analysis and Its Potential Application to the Colorado Public Utilities Commission with M. S. Gerber. The National Regulatory Research Institute (1979).

Towards an Analysis of Telephone License Contracts and Measured Rates with A. G. Buckalew, and D. Z. Czamanski. The National Regulatory Research Institute (1979).

Budget Billing Plans for Electric and Gas Utilities: An Analysis and Some Recommendations for Change with J-M Guldman, and C. Odle. The National Regulatory Institute (1979).

PUBLICATIONS: CONFERENCE PAPERS

The Efficiency of the Inefficient Firm Standard in Setting Network Access Charges with Carl Peterson. Prepared for 20th Annual Advanced Workshop in Regulation and Competition, Rutgers University (May 25, 2001).

Designing the New Regulatory Compact: The Role of Market Processes in the Design of Dynamic Incentives with Carl Peterson. Presented at *Incentive Regulation: Making it Work,* Advanced Workshop in Regulation and Competition, Rutgers University (January 19, 2001).

The Use of Nontraditional Universal Service Programs in a Competitive Local Exchange Market with Cindi Schieber. Presented at the National Association of Regulatory Commissioners Biennial Conference (1996).

Incentive Mechanisms as a Strategic Option for Acid Rain Compliance with D. W. South, and K.A. Bailey. Presented to the Future of Incentive Regulation in the Electric Utility Industry (November 1991).

Role of Emission Allowances in Utility Compliance Decisions with D. W. South, and K. A. Bailey. Presented at the Eighth Annual International Pittsburgh Coal Conference (October 1991).

Clean Coal Technology and Emissions Trading: Is There a Future for High Sulfur Coal Under the Clean Air Act Amendments of 1990? With K. A. Bailey, and D.W. South. P. R. Dugan, D. R. Quigley, Y. A. Attia (eds.), Processing and Utilization of High Sulfur Coals IV, proceedings of the Fourth International Conference on Processing and Utilization of High Sulfur Coals, Idaho Falls, ID., sponsored by the U.S. Department of Energy, et al., Elseveir Science Publishing Co. Inc., New York, NY.

Incentive Mechanisms as a Strategic Option in the Design of Regulatory Policies with D. W. South. Presented at National Association of Regulatory Utility Commissioners, Committee on Electricity, Subcommittee on Strategic Issues, San Francisco (July 1991).

Achieving Efficiency Through Emissions Trading: Paradoxes, Misconceptions and Market Performance with D. W. South. Presented at National Association of Regulatory Utility Commissioners, Committee on Electricity, Subcommittee on Environment and Efficiency, San Francisco (July 1991).

To Mitigate or Not To Mitigate: Regulatory Treatment of Emissions Trading Decisions and Its Effect on Marketplace Incentives with D. W. South. Presented at 84th Annual Meeting and

Exhibition, Air and Waste Management Association, Vancouver, British Columbia (June 1991).

Regulatory Incentives: A Means to Accelerate Clean Coal Technology Adoption for Acid Rain Compliance with D. W. South. Presented at Compliance and Emissions Trading Strategies: Facing Acid Rain Tradeoffs, Center for Regulatory Studies, Chicago, IL (June 1991).

Implementing Emissions Trading: Regulatory and Compliance Planning Issues with D. W. South. Presented at the Workshop on Implementing the Electric Utility Provisions of the Clean Air Act Amendments of 1990: Midwestern State Public Utility Commission Issues, National Regulatory Research Institute, Chicago, IL (May 1991).

Clean Coal Technology and Acid Rain Compliance: An Examination of Alternative Incentive Proposals with D. W. South. Presented at the American Power Conference, Chicago, IL. (April 1991).

Emissions Trading: Implications for Regulatory Policy with D. W. South. Presented at the 20th Annual Meeting of the Illinois Economic Association, Chicago, IL (October 1990).

The Future of Clean Coal Technology: An Evaluation of the Proposed CCT Incentives in S. 1630 with D. W. South. Presented at the 20th Annual Meeting of the Illinois Economic Association, Chicago, IL (October 1990).

The Future of Clean Coal Technology: An Evaluation of the Proposed Incentives in S. 1630 with D. W. South. Presented at the Seventh Annual International Pittsburgh Coal Conference, Pittsburgh, PA (September 1990).

The Future of Clean Coal Technology: An Evaluation of the Proposed Incentives in S. 1630 with D. W. South. Presented at the Seventh NARUC Biennial Regulatory Information Conference, Columbus, OH (September 1990).

Emissions Trading: Implications for Regulatory Policy with D. W. South. Presented at the Seventh NARUC Biennial Regulatory Information Conference, Columbus, OH (September 1990).

Alternatives to Rate of Return Regulation in the Telephone Industry: A Survey of the New Incentive Mechanism Proposals. Illinois Economic Association (October 1988).

Market Structures in the Local Communication Market: Fact and Fiction. Presented at the Intra-MSA Telecommunication Conference (September 1988).

The Quantity Theory of Money of J. M. Keynes: From the Tract to the General Theory with Christopher Marme. Proceedings of the 14th Annual Meeting of the History of Economics Society (June 1987).

Competitive Pricing and the Local Telephone Service Market: Some Problems of Balancing Equity and Efficiency. Illinois Economic Association (October 1986).

The Impact of Self-Selective Tariffs in Telecommunications Markets: The Design of an Experiment with M. J. Morey, and K. Costello. Proceedings of the Fifth NARUC Biennial Regulatory Conference (September 1986).

"An Incentive Plan to Control Power Plant Construction Costs," Third NARUC Biennial Information Conference (September 1982).

The Measurement of Efficiency and the Application of Incentives to Regulated Industries with K. Costello. Proceedings of the Second NARUC Biennial Regulatory Information Conference (September 1980).

PUBLICATIONS: REPORTS

Examination of Incentive Mechanisms for Innovative Technologies Applicable to Utility and Nonutility Power Generators, Environmental Assessment and Information Sciences Division, Argonne National Laboratory, publication ANL/EAIS/TM-2, (August 1993).

Avoided Cost Pricing: Theoretical Issues and Problems in Estimation. Prepared for the Illinois Department of Energy and Natural Resources (June 1990).

Least-Cost Planning in the Natural Gas Industry: An Overview of the Issues. Prepared for the Illinois Department of Energy and Natural Resources (December 1989).

Equity Issues in a Least-Cost Planning Environment. Prepared for the Illinois Department of Energy and Natural Resources (October 1989).

An Analysis of Prudency Evaluation Within a Least-Cost Planning Framework: The Case of Natural Gas Planning. Prepared for the Illinois Department of Energy and Natural Resources (October 1989).

Consumer Choice Under Risk and Uncertainty: The Role of Risk Perceptions as a Causal Factor in Consumer Decisionmaking. Prepared for the Energy and Environmental Systems Division, Argonne National Laboratory for U.S. DOE Office of Civilian Radioactive Waste Management (April 1989).

The Effects of Alternative Definitions of the Obligation to Serve on the Least-Cost Plans of Local Gas Distribution Companies. A Report for the Northern Illinois Alliance to Support Least-Cost Utility Planning (February 1989).

A Complete and Economic Study on Proposed IPCB Regulation R89-9: with J. L. Carlson, M. J. Morey, R. C. Hemphill, and W. Mikucki *Waste Prohibitions.* Prepared for the Illinois Department of Energy and Natural Resources.

The Role of Prices and the Pricing System Within the Regulatory Process. Prepared for the Illinois Department of Energy and Natural Resources (October 1986).

An Evaluation of the Minimization of Total Regional Requirements as an Objective in State-Wide Utility Planning Process. For the Illinois Department of Energy and Natural Resources (November 1986).

The Economic Incentives Provided by Section 9-215 (Excess Capacity Rule) of Proposed Illinois Public Utility Act. A Memorandum to the Joint Committee (June 1985).

An Analysis of the Issue of Cross-Subsidization in the Local Telephone Market. Prepared for the Joint Committee on Public Utility Regulation (May 1985).

A Survey of State Regulatory Actions and Legislative Developments Resulting from the Divestiture of AT&T. Prepared for the Joint Committee on Public Utility Regulations, Illinois State Legislature (March 1985).

A Memorandum to the Telecommunications Policy Working Group on the Concepts of Competing, Competition and Market Structure (September 1984).

The Evolution of Competition in the Telephone Industry and the Critical Issues Facing the Illinois Legislature on the Deregulation of Telephone Service. Prepared for the Select Joint Subcommittee on Regulatory Reform (July 1984).

The Review of Existing Power Plant Certificates, Monitoring of Power Plant Costs and the Allocation of Power Plant Cancellation Costs. Presented to the Sunset Task Force on Utility Regulatory Reform (January 1984).

Utility Efficiency Report Subtask IX - Final Report in Incentive Mechanisms. Prepared for the Illinois Commerce Commission (May 1981).

Utility Efficiency Report Subtask IV - Evaluation and Choice of Incentive Mechanisms. Illinois Commerce Commission for the U.S. Department of Energy (July 1980).

Utility Efficiency Report Subtask II - Review of Existing Incentive Mechanisms. Illinois Commerce Commission for the U.S. Department of Energy (March 1980).

Estimating Fuel Prices, a Memorandum to the Virginia State Corporation Commission with K. Kelly, National Regulatory Research Institute (1979).

Summary of Regulatory Commission Activities on Power Plant Productivity. The National Regulatory Research Institute draft report for the U.S. Department of Energy (1979).

UNPUBLISHED PAPERS

Designing the New Regulatory Contract: Using the Market Process to Design Regulatory Mechanisms, Draft Paper, NERA, Chicago, IL (November 2000).

The Reichbanks' Reaction Function During the Hyperinflation: An Alternative Test of the Causes of the Hyperinflation. (December 1987)

How Real Was The German Hyperinflation: A Reexamination of the Demand for Money Employing a Fully Specified Demand Function. (October 1987)

Bubbles During the Hyperinflation: An Empirical Test of the Interaction of the Double Bubble in Exchange Markets and Prices in Germany. (September 1987)

Evaluating the Causes of the Hyperinflation: A Reexamination of Monetary Policy and Theoretical Debates Concerning the Factors Affecting the German Money Supply from 1919 to 1923. (August 1987)

Decentralization vs. Coordination: An Examination of the Options for Deregulating the Electric Supply Industry. (June 1985)

Applied Fairness Theory: The Case of Allocating Canceled Power Plant Costs. (October 1983)

Is the Rational Expectations Equilibrium Business Cycle Theory a Neo-Austrian Theory? (October 1983)

An Examination of the Policy Alternatives for a Small Open Economy Experiencing a Trade Boom: The Case of Sterilization, Credit Rationing and Profit Taxation. (August 1983)

The Transmission of Monetary Shocks to Real Variables in the Business Cycle. (July 1983)

The Economics of Revolutions: A Club Theoretic Approach and a Case Study of England, 1642-1649. (Summer 1983)

Interest Rates, Market Efficiency and Expectations: The Effectiveness of Monetary Policy. (April 1983)

Towards Developing a Framework for Evaluating Incentive Mechanisms, Performance Measures and Institutional Choice in Deregulation. (August 1981)

A Critique of the Averch-Johnson Bias and a Test of Some Alternative Hypotheses. Master Thesis submitted to the Graduate School of the University of Wyoming. (July 1978)

An Overview of the Theories of Regulation and Pricing Policies for Regulated Industries. The National Regulatory Institute. (1979)

PRESENTATIONS

Performance-based Regulation and the Stand-Along Distribution System, Distribution System Planning, Maintenance and Reliability Conference, Denver, November 2000.

The Moral Obligation to Regulate Intelligently. Presented to the NARUC Telecommunications Staff Sub-Committee at the 112th Annual NARUC Convention, San Diego, November 2000.

Concepts of Utility Regulation for Developing Countries, 42nd Annual Regulatory Studies Program, Institute for Public Utilities, Michigan State University, August 2000.

The Essential Role of Earnings Sharing in the Design of Successful Performance-Based Regulation, Presented at EPRI's International Energy Pricing Conference, Washington, D.C. July 2000.

Transmission Pricing: Distance-sensitive, but not Pancaked. Presented at the EEI Transmission Pricing Conference, Washington, D.C., July 2000.

Telecommunications Rate Rebalancing. Presented to the NARUC Telecommunications Staff Sub-Committee at the NARUC Convention, Los Angeles, July 2000.

Coal, Energy and Clean Air: Challenges and Opportunities, facilitator, Illinois Department of Economic Development and Community Affairs and the Illinois Environmental Agency, Decatur, Illinois, July 2000.

PBR Strategy Seminar, Illinois Power Company, April 2000.

Strategic Application of Distributed Resources, Illinois Power Company, April 2000.

PBR Strategy Seminar, with Jeff Makholm, Georgia Power Company, April 2000.

Codes of Conduct for The Electric Industry, presented on behalf of the Edison Electric Institute at the Commissioner Liaison Committee meeting, NARUC Winter Meeting, Washington, D.C., March 2000.

Mergers and Acquisitions: Assessing the Trends in the Electric and Gas Industries, Presentation to the Midwest Energy Bar Association, Kansas City, March, 2000.

Telecommunications Industry in the Aftermath of TA96: Creating a Consistent Regulatory Framework amidst the Complexities of the Contemporary Marketplace, Presented to the NARUC Telecommunications Staff Sub-Committee at the NARUC Annual Convention, San Antonio, November 1999.

Cost Allocation for Affiliate Transactions, presented on behalf of the Edison Electric Institute at the Joint Meeting of the Finance and Technology, Gas and Electric Committees, NARUC Summer Meeting, San Francisco, July 1999.

Avoided Cost Calculation Methodologies, presentation to Energy Sector Representatives of Romania and Bulgaria, Bucharest, Romania (Fall 1999)

RTO and ISOs: Restructuring Options, presentation to Energy Sector Representatives of Romania and Bulgaria, Sinaia, Romania, (Summer 1999)

Convergence: The Utility of the Future, Presented to Wisconsin Electric Company and Wisconsin Gas merger transition team. (1999).

A Conflict of Paradigms: The Future Role of State Regulation of the Natural Gas Industry. Presented to the Midwest Gas Association (November 6, 1991).

Exit and Entry: Who Will Bear the Risk in a Competitive Natural Gas Industry. Presented at the conference "At the Crossroads: Restructuring the Natural Gas Industry," held by the Center for Regulatory Studies (October 1991).

"To Serve Man" - The Golden Rule or a Visit to the Twilight Zone: How to Reconcile the Obligation to Serve with Competitive Market Forces. Presented to the Gas Policy Committee of the Illinois Commerce Commission (April 16, 1991).

Regulatory Treatment of Emissions Trading Decisions and Their Effect on Marketplace Incentives with D. W. South Presented at the Notice of Inquiry Public Hearing, Illinois Commerce Commission (March 1991).

The National Energy Strategy: Impacts on the Farm Sector. Presented to the Illinois Farm Bureau Leadership Conference (February 1991).

Emissions Trading in the CAAA of 1990: Regulatory, Compliance Planning and Implementation Issues with D. W. South. Presented to the Illinois Commerce Commission (January 1991).

Obligations to Serve and Competition in the Natural Gas Industry. Luncheon presentation at the conference "Assessing the Competitiveness of the Natural Gas Industry," held by the Center for Regulatory Studies (October 1990).

Pricing in an Age of Opportunism: The Cost of Being a Provider of Last Resort. Presented at the conference "Natural Gas Supply Planning: The Implications for Planning Pricing and Competition," held by the Center for Regulatory Studies (March 1990).

Public Utility Issues: Long and Short-Term Impacts. Presented to the Illinois Farm Bureau Leadership Conference (February 1990).

Uncertainty in the Least-Cost Planning Process: The Case of Natural Gas. Presented at the conference "Issues in Least Cost Planning in the Natural Gas Industry," held by the Center for Regulatory Studies (December 21, 1989).

How Real was the German Hyperinflation: An Examination of the Factors Determining the German Money Supply, Demand and Prices Between 1920 and 1923 with M. J. Morey. Presented to the Economic History Workshop at the University of Illinois at Urbana-Champaign (December 1986).

While at the Illinois Commerce Commission, Dr. McDermott gave over one-hundred presentations on a variety of topics in the telecommunications, electricity and natural gas industries.

TESTIMONY

Illinois Commerce Commission, Docket No. 02-0067, Direct Testimony on behalf of Northern Illinois Gas Company d/b/a NICOR Gas Company. Testimony evaluated the effectiveness of the NICOR's current gas procurement performance-based regulation plan. (March 8, 2002).

New York Public Service Commission, Case No. 01-E-0359, Direct Testimony on behalf of New York State Electric and Gas Corporation regarding the appropriateness of the Company's proposed Electric Price Protection Plan. (August 3, 2001)

Kansas Corporation Commission, Docket No. 01-WSRE-436-RTS, Cross-Answering Testimony on behalf of the City of Topeka, Kansas, regarding cost causation issues and rate parity. (April 17, 2001)

North Dakota Public Service Commission, Case No. PU-400-00-195, Direct and Rebuttal testimony on behalf of Otter Tail Power Company regarding application to operate under a performance-based regulation plan. (Fall 2000)

North Dakota Public Service Commission, Case No. PU-401-00-36, Direct and Rebuttal testimony on behalf of Xcel Energy regarding application to operate under a performance-based regulation plan. (Fall 2000)

Federal Energy Regulatory Commission, Docket No. EL99-90-000, *City of Wichita, Kansas v. Western Resources, Inc.* Direct testimony on behalf of the City of Topeka, Kansas focusing on cost causation issues and rate parity. (September, 2000)

Indiana Utility Regulatory Commission, Cause No. 41753, Direct testimony on behalf of Southern Energy regarding approval of certification of power plant under reduced regulation. (August 2000)

California Public Utilities Commission, Application A.00-06-032, Direct and rebuttal testimony on behalf of Southern California Gas Company regarding the appropriateness of peaking rate for gas services. (Fall 2000).

Illinois Commerce Commission, Docket No. 99-0013, Rebuttal testimony on behalf of Commonwealth Edison regarding appropriate treatment of unbundled rates for meter service. (June 5, 2000)

Indiana Utility Regulatory Commission, Cause No. 41590, Rebuttal testimony on behalf of Southern Energy regarding approval of certification of power plant under reduced regulation. (June 2, 2000)

Testimony to Iowa General Assembly concerning electricity deregulation. (Spring 2000)

Kentucky Public Service Commission, Case No. 2000-095, Testimony on behalf of LG&E Energy Corp. regarding approval of a merger. (March 15, 2000)

Testimony to Environmental and Energy Committee of the Illinois State Senate, "Telecommunications Act of 1996: An Assessment and Policy Prescriptions." (February 16, 2000)

Illinois Commerce Commission, Docket No. 98-0195, Testimony on behalf of GTE North Inc. and GTE South Inc. regarding investigation into certain payphone issues as directed in Docket 97-0225. (December 21, 1999)

Public Service Commission of Wisconsin, Docket No. 6630-UR-111, Testimony on behalf of Wisconsin Electric Power Company regarding performance-based regulation. (September 1999)

South Dakota Public Utilities Commission, Docket No. NG98-010, Testimony on behalf of MidAmerican Energy Company for continuation of its incentive gas supply procurement program. (June 1999)

Iowa Utilities Board, Docket No. RPU-94-3, Request for Confidential Treatment on behalf of MidAmerican Energy Company. (April 7, 1999)

Federal Communications Commission, CC Docket No. 99-24, Affidavit and Reply Affidavit of Karl McDermott and William E. Taylor on behalf of Bell Atlantic Telephone Companies for forbearance from regulation as dominant carriers in Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Washington, DC, Vermont and Virginia. (January 20, 1999 and April 8, 1999)

Testimony to Illinois General Assembly joint committee on electricity deregulation. (Summer 1997)

Illinois Public Utilities Committee Telecommunications Subcommittee, Alternative Methods of Telecommunications Regulation. (March 27, 1991)

Illinois Commerce Commission, Docket No. 80-0167, on the use of incentive mechanisms at Clinton Power Plant construction site.

Illinois Commerce Commission, Docket No. 80-0544, on the use of the variable return to CWIP incentive model in the Illinois Power rate case.

Illinois Commerce Commission, Docket No. 80-0167, rebuttal testimony to Dr. Pappas on the use of incentive mechanisms at the Clinton Power Plant site.

Illinois Commerce Commission, Docket No. 80-0367, on the treatment of the time of use pricing standards of the Public Utility Regulatory Policy Act (PURPA) for Iowa-Illinois Gas and Electric Company.

Illinois Commerce Commission, Docket No. 81-0478, on the use of q-ratios determining the appropriate rate of return for Illinois Bell Telephone Company.

Illinois Commerce Commission, Docket No. 81-0478, on the appropriate cost of service method for pricing telecommunication service under the transition to competition.

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